

## PCT

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/012280

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-4, 6-12 as originally filed/furnished
- pages\* 5 received by this Authority on 14.07.2005 with letter of 14.07.2005
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 2-11 as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1 received by this Authority on 14.07.2005 with letter of 14.07.2005
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/012280

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	_____	YES
	Claims	1-11	NO
Inventive step (IS)	Claims	_____	YES
	Claims	1-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims	_____	NO
2. Citations and explanations (Rule 70.7)			
<p>This report makes reference to the following document:</p> <p>D1: WO 03/029172 A (SCHINDLER GOETZ-PETER; STEINBRENNER ULRICH (DE); BASF AG (DE); MAAS H) 10 April 2003 (2003-04-10)</p> <p><b>Novelty (PCT Article 33(2))</b></p> <p>D1 relates to a method of producing alkylaryl compounds and alkylarylsulfonates, alkylaryls and alkylarylsulfonates obtainable by means of this method, the use of the latter as surfactants, preferably in detergents and cleaners, and detergents and cleaners containing these compounds (D1, page 1, lines 8-11). It is already known from D1 that the ratio of terminal phenylalkanes (2- and 3-phenylalkanes) to internal phenylalkanes (4-, 5-, 6-phenylalkanes) plays a roll for the product properties (D1, page 1, lines 29-33). D1 (page 1, lines 29-33) and the present application (page 1, lines 29-30) suggest a 2-phenyl concentration of approximately 20-40% and a 2- and 3-phenyl concentration of approximately 40-60%. D1 (page 2, lines 1-8) and the present application (page 2, lines 1-7) acknowledge that a solution of LAS with very high <b>or</b> very low 2- and 3-phenyl concentrations can result in sub-optimal</p>			

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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solubility behavior.

The olefins according to the present claim 1 can be produced by means of the method a1-b1-d (page 5, lines 25-34) or a2-b2 (page 6, lines 10-15). The olefins according to D1 can be produced by means of the same methods (page 4, lines 4-13; page 4, line 33 to page 4, line 3). The alkylation process of D1 and of the present application are also carried out using the same catalysts (see D1, page 28, lines 23-31 and the present application, page 6, lines 20-22).

The present application (page 5, lines 20-24) states: "The olefin mixture *can* come from a number of sources and *can* be aftertreated by means of suitable steps ... For example, linear or targetedly branched olefins *can* be added to a mixture ..." However, such an aftertreatment is not mentioned in the embodiments or in the claims of the present application. Moreover, the fact that such an aftertreatment *can* be carried out is not regarded as limiting.

Thus D1 uses the same starting products in the same methods as the present application. D1 therefore implicitly discloses that olefins according to the present application are produced in order to produce alkylaryl compounds.

The subject matter of claims 1 to 11 therefore fails to meet the requirement of PCT Article 33(2) and (3).